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May 12, 2003

Via E-mail and Hand Delivery

Terry Abel, P.Eng  
Applications Branch  
Alberta Energy and Utilities Board  
640 – 5<sup>th</sup> Avenue SW  
Calgary, Alberta T2P 3G4

Re: EnCana Corporation's submission to General Bulletin GB 2003-12

EnCana Corporation ("EnCana") has reviewed the notice issued by the Alberta Energy Utilities Board dated April 3, 2003 entitled General Bulletin GB 2003-12 Gas Production in Oil Sands Areas (GB 2003-12). EnCana wishes to provide a submission in response to the GB 2003-12 notice.

Please find enclosed two copies of this submission.

Please direct further correspondence and communication to the following:

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Yours truly,

ENCANA CORPORATION

Douglas Castellino,  
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Enclosure (2 copies)

# ENCANA CORPORATION

## RESPONSE TO ALBERTA ENERGY AND UTILITIES BOARD

### GENERAL BULLETIN GB 2003 – 12

The Alberta Energy and Utilities Board (“EUB”) issued General Bulletin GB 2003-12 - Gas Production in Oil Sands Area requesting submissions on the following two issues:

- a) whether existing gas production from the Wabiskaw- McMurray Formation in the Athabasca Oil Sands Area should be shut in; and
- b) any alternative measures that might be taken to ensure the conservation of bitumen in the Wabiskaw-McMurray Formation in the Athabasca Oil Sands Area.

EnCana provides the following comments on these two issues and, in particular, suggests an alternative measure that EnCana believes will be an effective means of expediting a technological solution to the current gas over bitumen (“GOB”) issues in the Athabasca Oil Sands Areas (“AOSA”).

As more particularly outlined below, EnCana is vigorously opposed to the shut in of grandfathered production in the absence of a thorough review of production technologies that EnCana believes could provide a solution to GOB issues.

#### **a) Shut-in of Existing Gas Production in the Athabasca Oil Sands Area**

It is not clear exactly what issue the EUB is raising here.

If the issue is:

whether **all** existing gas production from the Wabiskaw-McMurray Formation in the Athabasca Oil Sands Area should be shut-in

the answer, clearly, is “no”. All that can be said is that there may be circumstances in the AOSA where pressure communication between a gas zone and the underlying bitumen is likely to occur, and there may be circumstances where such pressure communication is not likely to occur. Such an assessment must be made on a well-by-well basis. A blanket prohibition of existing gas production within the region would be wholly inappropriate.

If the issue is:

whether **any** existing gas production from the Wabiskaw-McMurray Formation in the Athabasca Oil Sands Area should be shut-in

the answer is “certainly not in the absence of the process contemplated by ID 99-1”. ID 99-1 (which was re-affirmed by the EUB in Decision 2003-023) provides that grandfathered gas wells will be allowed to continue to produce, subject to the resolution of any concerns that may be raised by oil sands leaseholders or by the EUB on its own initiative. Accordingly, if a bitumen owner or the EUB has a concern about an existing gas well in the AOSA, it must make such concern known and provide details of it. The gas producer must then be given the opportunity

to respond. Only if the concern remains unresolved can the EUB direct that production from the well be shut-in.

## **b) Alternative Measures to Ensure Conservation of Bitumen**

In contemplating measures to ensure bitumen conservation in AOSA, EnCana believes that the application of appropriate production technologies are important considerations. EnCana has significant experience with the use of technology which it believes will allow the production of both gas and bitumen in the AOSA. The Board should not consider shutting-in any grandfathered production until the Board has availed itself of a full review of appropriate production technology. In this submission, EnCana will outline its recent experience with the use of appropriate production technology and suggest a mechanism by which the Board can satisfy itself that technology exists which will resolve GOB issues.

### **EnCana's Recent Experience with the Application of Appropriate Production Technology**

EnCana believes a key component of a development plan that allows both gas and bitumen production is the application of appropriate production technology. The production technology must be specific to the technical and business drivers in the localised region of influence.

In some areas of the AOSA the initial virgin pressure in the McMurray Wabiskaw gas pools is below that required for practical Steam Assisted Gravity Drainage (SAGD) recovery using gas-lift. Thus, even if gas production were not allowed from a gas pool at virgin pressure in direct communication with a bitumen reservoir, bitumen recovery using high pressure SAGD would still be at risk. In this situation, implementing a gas-lift based SAGD recovery scheme will require additional pressure support to increase the pressure in the gas pool. Alternatively, Electric Submersible Pumps ("ESPs") could be used to provide economically viable SAGD recovery at low pressures.

EnCana has been actively involved in the development of thermal recovery production technologies to provide a technical solution to some of the SAGD recovery issues it has confronted in its ongoing operations. EnCana is encouraged by some recent results related to both repressuring and ESPs and proposes to share that information with the Board through the alternative measure outlined below.

### **Use of ESP's in Low Pressure SAGD Operation**

EnCana installed its first ESP over one year ago at its Foster Creek Phase 1 SAGD project, and now has a year's worth of production data. This data is part of the public record. Since the installation of this ESP, the well has produced trouble-free at an average rate of 4500 barrels per day of fluid and at temperatures exceeding 180 degrees Celsius. The utilisation of ESPs allows bitumen to be produced using SAGD production technology at low pressure rather than the high-pressure environment required for gas lift production schemes. One major advantage of this development is that the fluid rates can be measured with more certainty and the process operates with greater flexibility and stability. Production itself is also steadier, allowing more efficient operation of facilities. EnCana now has ESP units installed in five active SAGD production wells. The Foster Creek Phase 2 EUB application was recently revised and will utilise ESP's at low pressure for all production wells. EnCana believes that low-pressure SAGD operations will provide a viable alternative to high pressure SAGD for bitumen reservoirs where gas production from overlying zones limits the reservoir pressure.

Field data from active SAGD projects is continuing to demonstrate that performance predictions based on numerical simulation must be used with caution as they often fail to reflect technical realities and actual field operating conditions. EnCana's growing SAGD experience has driven its commitment to continued development of alternative lifting systems, such as ESPs, to ensure optimum recovery of bitumen in each resource area.

### **Repressuring of Gas Pools**

Further to discussions related to repressuring during the Chard-Leismer Hearing, EnCana has been working with Devon Canada Exploration ("Devon") on a repressuring scheme in the Leismer-McMurray CCC Pool in the Christina Lake area. Devon has recently received Board approval for the repressuring project. EnCana meanwhile continues to operate a number of SAGD well pairs as part of the Christina Lake Thermal Project in the bitumen reservoir underneath the target gas pool. EnCana and Devon will continue to work with the Board to ensure the results of the Devon repressuring scheme provide conclusive evidence on the technical feasibility of repressuring a low pressure gas reservoir in the GOB context in the McMurray-Wabiskaw interval. The provision of these results should enhance the evidence provided by EnCana during the Chard-Leismer Hearing on the viability of gas storage in a variety of reservoir types, including an example from the Clearwater Formation (the Fisher Grand Rapids E Pool and the Fisher Clearwater B pool) in a GOB area. This should demonstrate the viability of repressuring as an option for high pressure SAGD production of bitumen using gas lift methods, while allowing for recovery of both the gas and bitumen resources.

### **EnCana's Proposed Alternative Measure**

EnCana believes that the success it is experiencing with the use of ESPs and repressurization should be considered by the Board **prior** to the Board considering the shut-in of grandfathered wells. EnCana believes that a joint industry/government procedural vehicle must be developed immediately to allow EnCana, and other interested parties, to provide data to the Board on the use of production technologies to resolve GOB issues (the "GOB Technology Program"). The GOB Technology Program would allow parties to provide information on the performance of already operating projects and to propose new projects that would provide the Board with information on production technologies that will assist in resolving GOB issues. EnCana believes that the GOB Technology Program should be the vehicle for the submission of information regarding the use of appropriate production technology by EnCana and other parties. Arrangements would need to be made to respect the confidentiality concerns of all parties.

EnCana is of the view that the Government, as the resource owner, should provide a share of the funding necessary for a full examination of the use of production technologies through the GOB Technology Program.

In support of its suggested alternative measure, EnCana proposes the following schedule for consideration of the use of production technologies by the GOB Technology Program:

- June 30, 2003 - date by which producers and the Alberta Government indicate interest in participating in the GOB Technology Program;
- August 1, 2003 – preliminary report to the EUB on Alberta Government funding, and terms of reference, for the GOB Technology Program; and

- No later than February 1, 2004 – (precise date to be specified by the parties to the GOB Technology Program). Initial reports to the EUB through the GOB Technology Program on use of appropriate technologies to allow both gas and bitumen production in the AOSA.

In EnCana's submission, the schedule proposed above will allow a full canvas of the issues around Alberta Government funding and provide the Board with information respecting the use of appropriate production technologies prior to any evaluation of the potential shut-in of grandfathered wells.

## **Conclusion**

EnCana believes that the application of appropriate production technology will allow maximum economic recovery of both gas and bitumen in the AOSA. Therefore, EnCana is vigorously opposed to shutting-in existing gas production from the Wabiskaw-McMurray formation in the AOSA prior to the review of specific wells, as per the process contemplated in ID 99-1, and an assessment of appropriate production technologies through the GOB Technical Program. GOB issues are site specific, and, therefore, require site specific solutions. The shut-in of grandfathered wells on a blanket basis ignores the localized nature of GOB issues and is inequitable given the major capital investments made in gas production on the basis of the existing regulatory regime. A blanket shut-in of grandfathered wells would alter the commercial basis upon which investment decisions were made, and remove the regulatory and commercial certainty necessary for continued investment in the AOSA.

Finally, EnCana urges the Board to immediately begin processing the deferred Wabiskaw – McMurray formation gas production ID 99-1 applications in the AOSA, subject to the outcome of the GOB Technology Program.

All of which is respectfully submitted this 12<sup>th</sup> day of May, 2003.

## **EnCana Corporation**

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Patricia McCunn-Miller  
Vice-President, Environment and Regulatory Affairs.